

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)	Docket Number 416272005602	Application Number 10/698,824
	Applicants Bob B. BUCHANAN et al.	
	Filing Date October 30, 2003	Group Art Unit Not Yet Assigned
	Mailing Date December 4, 2003	

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
CMK	1.	Apr. 1974	3,803,326	Craig et al.			
I	2.	Sep. 1983	4,405,648	Atsumi et al.			
CMK	3.	Jul. 1991	5,028,419	Pigiet			

FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO
CMK	4.	Jul. 1975	1 400 972	Great Britain			
I	5.	Jun. 1976	1 420 843	Great Britain			
CMK	6.	May 1994	WO 96/12799	WIPO			

OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
CMK	7.	Holmgren, A. (1979) "Reduction of disulfides by thioredoxin. Exceptional reactivity of insulin and suggested functions of thioredoxin in mechanism of hormone action" <i>J. Biological Chemistry</i> 254 (18): 9113-9119.
	8.	Schernthaner, G. (1993) "Immunogenicity and allergenic potential of animal and human insulins" <i>Diabetes care (Suppl 3)</i> : 155-165.
	9.	Astwood et al., "Stability of Food Allergens to Digestion in Vitro," <i>Nature Biotechnology</i> , 14(10): 1269-1273, (1996).
	10.	Birk, "Proteinase Inhibitors from Plant Sources," <i>Method Enz.</i> , 45:695-739 (1976).
	11.	Birk, Y., "The Bowman-Birk Inhibitor," <i>Int. J. Peptide Protein Res.</i> 25:113-131 (1985).
	12.	Blomback et al. "Enzymic reduction of disulfide bonds in fibrinogen by the thioredoxin system. I identification of reduced bonds and studies on reoxidation process" <i>Thrombosis Research</i> 4(1):55-75 (1974).
CMK	13.	Bodenstein-Lang, J. et al., "Animal and Plant Mitochondria Contain Specific Thioredoxins," <i>FEBS Lett.</i> , 258:22-26 (1989).

EXAMINER:

DATE CONSIDERED:

12/4/05

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.



PTO/SB/08 (2-92)

Sheet 2 of 5

Form PTO-1449

INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number 416272005602

Application Number 10/698,824

Applicants

Bob B. BUCHANAN et al.

Filing Date October 30, 2003

Group Art Unit Not Yet Assigned

Mailing Date December 4, 2003

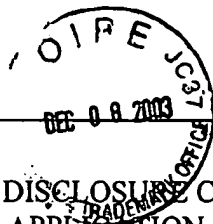
CMK	14.	Buchanan et al., "Thioredoxin: A Multifunctional Regulatory Protein with a Bright Future in Technology and Medicine," Archives of Biochemistry and Biophysics, 314(2): 257-260, (1994).
	15.	Buchanan et al., "Thioredoxin-linked Mitigation of Allergic Responses to Wheat," Proceedings of the National Academy of Sciences of the United States of America, 94(10): 5372-5377 (1997).
	16.	Burks, A.W. et al. (1992), "Allergenicity of peanut and soybean extracts altered by chemical and thermal denaturation in patients with atopic dermatitis and positive food challenges," J. Allergy Clin. Immunol. 90:889-897.
	17.	Bushuk, W., et al., "Wheat Cultivar Identification by Gliadin Electrophoregrams. I. Apparatus, Method and Nomenclature," Can. J. Plant Sci. 58:505-515 (1978).
	18.	Crawford et al., "Evidence for Function of the Ferredoxin/Thioredoxin System in the Reductive Activation of Target Enzymes of Isolated Intact Chloroplasts," Arch. Biochem. Biophys. 271(1):223-239 (1989).
	19.	Dahle et al., "The Weakening Action of Thiocetic Acid in Unyeasted and Yeasted Doughs," Cereal Chem. 43:682-688 (1966).
	20.	De la Motte-Guery, F. et al., "Mutation of a Negatively Charged Amino Acid in Thioredoxin Modifies its Reactivity with Chloroplastic Enzymes," Eur. J. Biochem. 196:287-294 (1991).
	21.	Decottignies, P. et al. (1988) "Primary Structure of the Light-dependent Regulatory Site of Corn NADP-Malate Dehydrogenase", The Journal of Biological Chemistry 263(24):11780-11785.
	22.	Droux, M. et al. (1987) "Ferredoxin-Thioredoxin Reductase, an Iron-Sulfur Enzyme Linking Light to Enzyme Regulation in Oxygenic Photosynthesis: Purification and Properties of the Enzyme from C.sub.3, C.sub.4, and Cyanobacterial Species", Archives of Bioche.
	23.	Edman et al., "Sequence of Protein Disulphide Isomerase and Impications of its Relationship to Thioredoxin," Nature, 317(19):267-270 (1985).
	24.	Elsayed, S. et al. (1971) "Characterixation of a major allergen (cod). Observations on effect of denaturation on allergenic activity," J. Allergy 47:283-291.
	25.	Esch et al. (1989), "Identification and localization of allergenic determinants on Grass Group I antigens using monoclonal antibodies," J. Immunol. 142:179-184.
	26.	Fickenscher, K., et al., "Purification and Properties of the Cytoplasmic Glucose-6-Phosphate Dehydrogenase from Pea Leaves," Arch. Biochem. Biophys. 247:393-402 (1986).
CMK	27.	Florencio et al., "An NADP/Thioredoxin System in Leaves: Purification and Characterization of NADP-Thioredoxin Reductase and Thioredoxin ih from Spinach," Arch. Biochem. Biophys., 266(2):496-507 (1988).

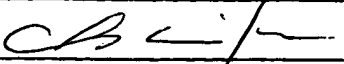
EXAMINER:

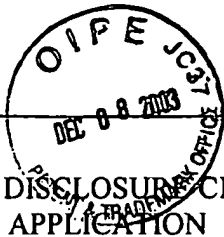
DATE CONSIDERED:

10/4/05

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.



Form PTO-1449		Docket Number 416272005602	Application Number 10/698,824
INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)		Applicants Bob B. BUCHANAN et al.	
		Filing Date October 30, 2003	Group Art Unit Not Yet Assigned
		Mailing Date December 4, 2003	
CMK	28.	Frick et al., "Immunoglobulin E Antibodies to Pollens Augmented in Dogs by Virus Vaccines," Am. J. Vet. Res., 44(3):440-445 (1983).	
	29.	Holmgren (1985), "Thioredoxin," Ann. Rev. Biochem. 54:237-271.	
	30.	Holmgren et al. Enzymic reduction of disulfide bonds by thioredoxin. The reactivity of disulfide bonds in human choriogonadotropin and its subunits. European J. Biochemistry 70(2):377-83 1976.	
	31.	Holmgren et al., "Thioredoxin and Glutaredoxin Systems" J. Biol. Chem., 264(24):13963-13966 (1989).	
	32.	Jacquot, J.-P., et al., "Enzyme Regulation in C.sub.4 Photosynthesis.sup.1,2" Plant Physiol. 68:300-304 (1981).	
	33.	Johnson et al., "Reduction of Purothionin by the Wheat Seed Thioredoxin System," Plant Physiol., 85:446-451 (1987).	
	34.	Johnson, T.C., et al., "Thioredoxin and NADP-Thioredoxin Reductase from Cultured Carrot Cells," Planta 171:321-331 (1987).	
	35.	Jones, B.L., et al. "Amino Acid Sequences of the Two alpha-Purothionins of Hexaploid Wheat," Cereal Chem. 54:511-523 (1977).	
	36.	Kahlert et al., "Epitope Analysis of the Allergen Ovalbumin With Monoclonal Antibodies and Patients'IgE," Molecular Immunology, 29(10):1191-1201 (1992).	
	37.	Kasarda, D.D., et al., "Wheat Proteins," Adv. Cer. Sci. Tech. 1:158-236 (1976).	
	38.	Kassel, B., et al., "The Basic Trypsin Inhibitor of Bovine Pancreas," Biochem. Biophys. Res. Commun. 20:463-468 (1965).	
	39.	Kobrehel, K. et al., "Isolation and Partial Characterisation of Two Low Molecular Weight Durum Wheat (Triticum durum) Glutenins," J. Sci. Food Agric. 48:441-452 (1989).	
	40.	Laemmli, "Cleavage of Structural Proteins During the Assembly of the Head of Bacteriophage T4" Nature 227:680-685 (1970).	
	41.	MacRitchie, F., et al., "Flour Polypeptides Related to Wheat Quality," Adv. Cer. Sci. Tech. 10:79-145 (1990).	
	42.	Marcus, F. et al. (1988) "Comparative amino acid sequence of fructose-1,6-bisphosphatases: Identification of a region unique to the light-regulated chloroplast enzyme", Proc. Natl. Acad. Sci. USA 85:5379-5383.	
	43.	Matsuda et al., "Reduction of Ovomuroid Immunogenic Activity on Peptic Fragmentation and Heat Denaturation," Agric. Biol. Chem., 49(7):2237-2241 (1985).	
CMK	44.	Miki, J. et al. (1988) "The gamma.-subunit of ATP synthase from spinach chloroplasts Primary structure deduced from the cloned cDNA sequence" FEBS 232(1):221-226.	
EXAMINER: 		DATE CONSIDERED: 10/9/05	
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.			



Form PTO-1449

INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number 416272005602

Application Number 10/698,824

Applicants

Bob B. BUCHANAN et al.

Filing Date October 30, 2003

Group Art Unit Not Yet Assigned

Mailing Date December 4, 2003

CMK	45.	Morton, J.I. et al. (161), "Immunochemical Studies of Modified Ovomucoids," Arch. Biochem. Biophys. 93:661-665.
	46.	Muller, E.D. Thioredoxin deficiency in yeast prolongs S phase and shortens the G1 interval of the cell cycle. J. Biological Chemistry 266 (14): 9194-9202 May 15, 1991.
	47.	Muller, et al., "Thioredoxin is Essential for Photosynthetic Growth" J. Biol. Chem. 264:4008-4014 (1989).
	48.	Nishiyama et al., "Reactivity of Sulfhydryls in Reduced Gluten with Lipid Hydroperoxides," Agric. Biol. Chem., 51(5):1291-1297 (1987).
	49.	Osborne, T.B., et al., "Proteins of the Wheat Kernel," Amer. Chem. J. 15:392-471 (1983).
	50.	Porter, M.A., et al. (1988) "Characterization of the Regulatory Thioredoxin Site of Phosphorinulokinase", The Journal of Biological Chemistry 263(1):123-129.
	51.	Raines, C.A. et al. (1988) "Chloroplast fructose-1,6-bisphosphatase: the product of a mosaic gene", Nucleic Acids Research 16:7931-7942.
	52.	Rothenbuhler et al., "Disulfide Reduction and Molecular Dissociation Improves the Proteolysis of Soy Glycinin by Pancreatin in vitro," Journal of Food Science, 51(6):1479-1482, (1986).
	53.	Russel et al, "Sequence of Thioredoxin Reductase from Escherichia coli," J. Biol. Chem., 263(18):9015-9019 (1988).
	54.	Ryan, C.A. et al., "Proteinase Inhibitors," The Biochemistry of Plants, 6:351-370 (1981).
	55.	Sapirstein, H.D., et al., "Computer-Aided Analysis of Gliadin Electrophoregrams. I. Improvement of Precision of Relative Mobility Determination by Using a Three Reference Band Standardization," Cereal Chem. 62:372-377 (1985).
	56.	Scheibe, R., et al., "Chloroplast Glucose-6-Phosphate Dehydrogenase: Km Shift upon Light Modulation and Reduction," Arch. Biochem. Biophys. 274:290-297 (1990).
	57.	Schernthaner, G. "Immunogenicity and allergenic potential of animal and human insulins" Diabetes care 16 (Suppl 3):155-65. Dec. 1993.
	58.	Schiavo, G. et al. (1990) "An Intact Interchain Disulfide Bond Is Required for the Neurotoxicity of Tetanus Toxin", Infection and Immunity 58(12):4136-4141.
	59.	Shewry, P.R., et al., "Seed Storage Proteins of Economically Important Cereals," Adv. Cer. Sci. Tech. 7:1-83 (1985).
	60.	Suske, G., et al., "NADPH-Dependent Thioredoxin Reductase and a New Thioredoxin from Wheat," Z. Naturforsch. C., 34:214-221 (1979).
CMK	61.	Tatham, A.S., et al., "Structural Studies of Cereal Prolamins, Including Wheat Gluten," Adv. Cer. Sci. Tech. 10:1-78 (1990).

EXAMINER:

DATE CONSIDERED:

10/9/05

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.



Form PTO-1449

INFORMATION DISCLOSURE
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number 416272005602

Application Number 10/698,824

Applicants

Bob B. BUCHANAN et al.

Filing Date October 30, 2003

Group Art Unit Not Yet Assigned

Mailing Date December 4, 2003

CRK	62.	Tsang, M.L.-S., "Thioredoxin/Glutaredoxin System of Chlorella," Plant Physiol. 68:1098-1104 (1981).
	63.	Wada et al., "Purothionin: A Seed Protein with Thioredoxin Activity," FEBS Letters, 124(2):237-240 (1981).
	64.	Watt, D. D., et al, "Effects on Lethality of Toxins in Venom from the Scorpion Centruroides Sculpturatus by Group Specific Reagents," Toxicon 10:173-181 (1972).
	65.	Wide et al., "Diagnosis of Allergy by an In-Vitro Test for Allergen Antibodies," The Lancet, pp. 1105-1107 (Nov. 25, 1976).
	66.	Wolosiuk, R.A., et al., "Thioredoxin and Glutathione Regulate Photosynthesis in Chloroplasts," Nature 266:565-567 (1977).
CMK	67.	Yamada, "Inactive Debranching-Enzyme in Rice Seeds, and its Activation," Carbohydrate Research, 90:253-157 (1981).

EXAMINER:

DATE CONSIDERED:

10/4/05

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.